Remarks

The Office Action mailed July 23, 2003 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-20 are pending in this application. Claims 1-20 stand rejected.

In accordance with 37 C.F.R. 1.136(a), a one-month extension of time is submitted herewith to extend the due date of the response to the Office Action dated July 23, 2003 for the above-identified patent application from October 23, 2003 through and including November 23, 2003. In accordance with 37 C.F.R. 1.17(a)(2), authorization to charge a deposit account in the amount of $110.00 to cover this extension of time request also is submitted herewith.

The rejection of Claims 1-9 and 11-20 under 35 U.S.C. § 103(a) as being unpatentable over Thearling (U.S. Patent No. 6, 240,411) in view of Direct Marketing Magazine, *Increasing Customer Value By Integrating Data Mining and Campaign Management Software*, Kurt Thearling, (February 1999) (referred to herein as "Direct Marketing") is respectfully traversed.

Applicants respectfully submit that neither Thearling nor Direct Marketing, considered alone or in combination, describe or suggest the claimed invention. As discussed below, neither Thearling nor Direct Marketing, considered alone or in combination, describe or suggest a method of evaluating marketing campaign data that includes providing a plurality of analytic models including marketing and risk models, determining a sequential order for combining the models, combining the models in the determined sequential order to generate marketing campaign data, evaluating the model combination using structures that segment gains charts to discover where the model combination is under performing, and evaluating a performance of the model combination over time.

Thearling describes a method and apparatus for classifying a plurality of records in a database (10) that includes providing a first model (16) for ascertaining a first characteristic of each of the records, forming a query that includes a reference to first model (16), using the

reference to execute first model (16) to generate a score for the first characteristic of at least one of the plurality of records, and selecting a selected set of the records wherein each record of the selected set satisfies the selection criteria. Notably, Thearling does not describe nor suggest marketing and risk models. Moreover, Thearling does not describe nor suggest determining a sequential order for combining models, combining the models in the determined sequential order to generate marketing campaign data, evaluating the model combination using structures that segment gains charts to discover where the model combination is under performing, and evaluating a performance of the model combination over time.

Direct Marketing is an article that generally describes utilizing data mining results to execute marketing campaigns that enhance the profitability of customer relationships. Direct Marketing defines data mining as automating the detection of relevant patterns in a database. The steps outlined for integrating data mining and campaign management include: (1) creating the model, and (2) dynamically scoring the data.

Claim 1 recites a method of evaluating marketing campaign data, the data being in the form of database scores, stored procedures, and On Line Analytical Processing (OLAP) multidimensional structures, wherein the method includes "providing a plurality of analytic models including marketing and risk models...determining a sequential order for combining the models...combining the models in the determined sequential order to generate marketing campaign data...evaluating the model combination using structures that segment gains charts to discover where the model combination is under performing...evaluating a performance of the model combination over time...and defining user trends."

Neither Thearling nor Direct Marketing, considered alone or in combination, describe or suggest a method as recited in Claim 1. More specifically, neither Thearling nor Direct Marketing, considered alone or in combination, describe or suggest a method of evaluating marketing campaign data that includes determining a sequential order for combining the models, combining the models in the determined sequential order to generate marketing campaign data, evaluating the model combination using structures that segment gains charts to discover where

the model combination is under performing, and evaluating a performance of the model combination over time.

Rather, Thearling describes a method and apparatus for classifying a plurality of records in a database that includes forming a query that includes a reference to a first model, and using the reference to execute the first model to generate a score for the first characteristic of at least one of the plurality of records in a database; and Direct Marketing generally describes utilizing data mining results to execute marketing campaigns that enhance the profitability of customer relationships.

Although Thearling discusses at col. 6, lines 34-37 "a model evaluator, responsive to the selection criteria processor, to evaluate the model", Thearling does not describe nor suggest evaluating a model to discover where the model is under performing, or evaluating a performance of a model over time. Rather, the model evaluation described in Thearling includes applying a selected model against a restricted temporary table. For example, Thearling states at col. 12, lines 33-35 that "Fig. 10B is an example of partial results in the process of building a restricted table for evaluation by the model 'X'", and col. 12, lines 50-51 states that "Fig. 10C illustrates evaluation of the model 100, against a restricted table". In other words, the model evaluation described in Thearling does not describe nor suggest evaluating a model as described in the present invention. Rather, the model evaluation described in Thearling is merely an application of a selected model against a restricted temporary table. As discussed below, Thearling does not describe nor suggest evaluating a model combination to discover where the model combination is under performing, and evaluating a performance of the model combination over time.

Thearling does not describe nor suggest determining a sequential order for combining models, and combining the models in the determined sequential order to generate marketing campaign data. Although Thearling discusses at col. 13, lines 22-24 that "multiple models may be included in a query", Thearling further discusses that each model is applied one at a time to the database (see col. 13, lines 25-65). Therefore, Thearling does not describe nor suggest

determining a sequential order for combining models, and combining the models in the determined sequential order to generate marketing campaign data. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Thearling in view of Direct Marketing.

Claims 2-8 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-8 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-9 likewise are patentable over Thearling in view of Direct Marketing.

Claim 9 recites a system for evaluating marketing campaign data that includes a customer database, a graphical user interface, and a "targeting engine embedded with a plurality of analytic models including marketing and risk models, the marketing models include at least one of a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model, the risk models include at least one of a payment behavior prediction model, a delinquency model, a bad debt model, a fraud detection model, a bankruptcy model, and a hit and run model, wherein the targeting engine is configured to...determine a sequential order for combining the models...combine the models in the determined sequential order to generate marketing campaign data...evaluate the model combination using structures that segment gains charts to discover where the model combination is under performing...evaluate a performance of the model combination over time...and define trends relating to the marketing campaign data."

Neither Thearling nor Direct Marketing, considered alone or in combination, describe or suggest a system as recited in Claim 9. More specifically, neither Thearling nor Direct Marketing, considered alone or in combination, describe or suggest a targeting engine configured to determine a sequential order for combining the models, combine the models in the determined sequential order to generate marketing campaign data, evaluate the model combination using structures that segment gains charts to discover where the model combination is under performing, evaluate a performance of the model combination over time, and define trends relating to the marketing campaign data.

Moreover, neither Thearling nor Direct Marketing, considered alone or in combination, describe or suggest marketing models that include at least one of a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model; and risk models that include at least one of a payment behavior prediction model, a delinquency model, a bad debt model, a fraud detection model, a bankruptcy model, and a hit and run model.

Rather, Thearling describes a method and apparatus for classifying a plurality of records in a database that includes forming a query that includes a reference to a first model, and using the reference to execute the first model to generate a score for the first characteristic of at least one of the plurality of records in a database; and Direct Marketing generally describes utilizing data mining results to execute marketing campaigns that enhance the profitability of customer relationships.

Although Thearling discusses a "model evaluator", Thearling does not describe nor suggest evaluating a model to discover where the model is under performing, or evaluating a performance of a model over time. Rather, the "model evaluator" described in Thearling applies a selected model against a restricted temporary table. In other words, the model evaluation described in Thearling does not describe nor suggest evaluating a model as described in the present invention. Rather, the model evaluation described in Thearling is merely an application of a selected model against a restricted temporary table.

Additionally, Thearling does not describe nor suggest determining a sequential order for combining models, and combining the models in the determined sequential order to generate marketing campaign data. Although Thearling discusses at col. 13, lines 22-24 that "multiple models may be included in a query", Thearling also discusses that each model is applied one at a time to the database (see col. 13, lines 25-65). Therefore, Thearling does not describe nor suggest determining a sequential order for combining models, and combining the models in the determined sequential order to generate marketing campaign data. Accordingly, Applicants respectfully submit that Claim 9 is patentable over Thearling in view of Direct Marketing.

Claims 11-19 depend, directly or indirectly, from independent Claim 9. When the recitations of Claims 11-19 are considered in combination with the recitations of Claim 9, Applicants submit that dependent Claims 11-19 likewise are patentable over Thearling in view of Direct Marketing.

Claim 20 recites a method of evaluating marketing campaign data that includes, wherein the data is in the form of customer lists, database scores, stored procedures, and On Line Analytical Processing (OLAP) multidimensional structures, the method includes "providing a plurality of analytic models including marketing and risk models, the marketing models include at least one of a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model, the risk models include at least one of a payment behavior prediction model, a delinquency model, a bad debt model, a fraud detection model, a bankruptcy model, and a hit and run model...determining a sequential order for combining the models...combining the models in the determined sequential order to generate marketing campaign data...generating gains charts by comparing marketing campaign customer lists to corresponding marketing campaign results...evaluating the model combination by using structures that segment gains charts to identify where the model combination is under performing...evaluating over time and over a plurality of marketing campaigns at least one of a performance of the model combination ...and identifying user defined trends including identifying trends within segments by analyzing structures of a plurality of marketing campaigns in chronological order."

Neither Thearling nor Direct Marketing, considered alone or in combination, describe or suggest a method as recited in Claim 20. More specifically, neither Thearling nor Direct Marketing, considered alone or in combination, describe or suggest a method that includes providing a plurality of analytic models including marketing and risk models, determining a sequential order for combining the models, combining the models in the determined sequential order to generate marketing campaign data, evaluating the model combination using structures that segment gains charts to identify where the model combination is under performing, and

evaluating over time and over a plurality of marketing campaigns at least one of a performance of the model combination.

Moreover, neither Thearling nor Direct Marketing, considered alone or in combination, describe or suggest a method that includes providing a plurality of analytic models including marketing and risk models, wherein the marketing models include at least one of a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model, and wherein the risk models include at least one of a payment behavior prediction model, a delinquency model, a bad debt model, a fraud detection model, a bankruptcy model, and a hit and run model.

Rather, Thearling describes a method and apparatus for classifying a plurality of records in a database that includes forming a query that includes a reference to a first model, and using the reference to execute the first model to generate a score for the first characteristic of at least one of the plurality of records in a database; and Direct Marketing generally describes utilizing data mining results to execute marketing campaigns that enhance the profitability of customer relationships. Accordingly, Applicants respectfully submit that Claim 20 is patentable over Thearling in view of Direct Marketing.

Notwithstanding the above, the rejection of Claims 1-9 and 11- 20 under 35 U.S.C. § 103(a) as being unpatentable over Thearling in view of Direct Marketing is further traversed on the grounds that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Thearling using the teachings of Direct Marketing. More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight

reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Neither Thearling nor Direct Marketing, considered alone or in combination, describe or suggest the claimed combination. Rather, the present Section 103 rejection appears to be based on a combination of teachings selected from multiple references in an attempt to arrive at the claimed invention. Specifically, Thearling teaches a method and apparatus for classifying a plurality of records in a database that includes forming a query that includes a reference to a first model, and using the reference to execute the first model to generate a score for the first characteristic of at least one of the plurality of records in a database. Direct Marketing generally describes utilizing data mining results to execute marketing campaigns that enhance the profitability of customer relationships. Since there is no teaching nor suggestion for the combination of Thearling and Direct Marketing, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection of Claims 1-9 and 11-20 be withdrawn.

For at least the reasons set forth above, Applicants respectfully request that the 35 U.S.C. § 103(a) rejection of Claims 1-9 and 11-20 be withdrawn.

The rejection of Claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Thearling (U.S. Patent No. 6,240,411) ("Thearling") in view of Direct Marketing Magazine, *Increasing Customer Value By Integrating Data Mining and Campaign Management Software*, Kurt Thearling, (February 1999) (referred to herein as "Direct Marketing") and *Building Data Mining Applications for CRM*, Alex Berson et al., (December 1999) ("Berson") is respectfully traversed.

Thearling and Direct Marketing are both described above. The Berson reference provided by the Examiner is a portion of a table of contents for a book. Berson lists Chapter 4 as "Data Warehousing Components", and further lists a section within Chapter 4 as "OLAP Tools". Berson, however, does not describe nor suggest a targeting engine configured to determine a sequential order for combining models, combine the models in the determined sequential order to generate marketing campaign data, evaluate the model combination using structures that segment gains charts to discover where the model combination is under performing, evaluate a performance of the model combination over time, and define trends relating to the marketing campaign data.

Claim 10 depends from independent Claim 9. Claim 9 recites a system for evaluating marketing campaign data that includes a customer database, a graphical user interface, and a "targeting engine embedded with a plurality of analytic models including marketing and risk models, the marketing models include at least one of a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model, the risk models include at least one of a payment behavior prediction model, a delinquency model, a bad debt model, a fraud detection model, a bankruptcy model, and a hit and run model, wherein the targeting engine is configured to...determine a sequential order for combining the models...combine the models in the determined sequential order to generate marketing campaign data...evaluate the model combination using structures that segment gains charts to discover where the model combination

is under performing...evaluate a performance of the model combination over time...and define trends relating to the marketing campaign data."

None of Thearling, Direct Marketing, or Berson, considered alone or in combination, describe or suggest a system as recited in Claim 9. More specifically, none of Thearling, Direct Marketing, or Berson, considered alone or in combination, describe or suggest a targeting engine configured to determine a sequential order for combining the models, combine the models in the determined sequential order to generate marketing campaign data, evaluate the model combination using structures that segment gains charts to discover where the model combination is under performing, evaluate a performance of the model combination over time, and define trends relating to the marketing campaign data.

Moreover, none of Thearling, Direct Marketing, or Berson, considered alone or in combination, describe or suggest marketing models that include at least one of a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model; and risk models that include at least one of a payment behavior prediction model, a delinquency model, a bad debt model, a fraud detection model, a bankruptcy model, and a hit and run model.

Rather, Thearling describes a computer-implemented self-optimizing marketing system that includes an optimization engine that includes a scoring system for ordering members of at least one of a campaign population and customer population such that a set of offers to buy and offers to sell the same resource is created; Direct Marketing generally describes utilizing data mining results to execute marketing campaigns that enhance the profitability of customer relationships; and Berson mentions OLAP tools. Accordingly, Applicants respectfully submit that Claim 9 is patentable over Thearling in view of Direct Marketing and Berson.

When the recitations of Claim 10 are considered in combination with the recitations of Claim 9, Applicants submit that dependent Claim 10 likewise is patentable over Thearling in view of Direct Marketing and Berson.

Notwithstanding the above, the rejection of Claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Thearling in view of Direct Marketing and Berson is further traversed on the grounds that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Thearling using the teachings of Direct Marketing or Berson. None of Thearling, Direct Marketing or Berson, considered alone or in combination, describe or suggest the claimed combination. Rather, the present Section 103 rejection appears to be based on a combination of teachings selected from multiple references in an attempt to arrive at the claimed invention. Since there is no teaching nor suggestion for the combination of Thearling, Direct Marketing and Berson, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection of Claim 10 be withdrawn.

For at least the reasons set forth above, Applicants respectfully request that the 35 U.S.C. § 103(a) rejection of Claim 10 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

Daniel M. Fitzgerald
Registration No. 38,880
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070